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# TechDAS Air Force Two turntable

by Alan Sircom

**O**f all the high-end superdecks, few generated quite as much interest as TechDAS' Air Force One. Everything on a turntable that could be pumped up or held down by air or vacuum, was... and was made to a standard that most other turntable makers could only dream of. With the Continuum project now history, the 'One has become the turntable among 'Vinylista Extrema'. However, the price of the 'One is a big ask for many enthusiasts, and the Air Force Two goes some way to address this (a still cheaper Air Force Three was shown at the Munich High-End 2015). This new turntable is a far smaller, transcription style design, with provision for three different arms. Weird and wonderful!

TechDAS took all the elements of the Air Force One and worked out what could be simplified. This isn't an easy task: simplifying an air bearing or a vacuum hold-down system without fundamentally wrecking the advantages of such components in the process is extremely difficult, especially as Nishikawa-san (TechDAS designer and CEO) is convinced – rightly, in my opinion – that compression is pivotal in the design of any air-bearing system. This means the default, lower-cost way of making an air-bearing (a fishtank pump) is out of the running, and any TechDAS design has to rely on a custom-made solenoid-valve system with extremely small air holes, and an air condenser to cancel out ripple. And, like it's bigger brother, the Air Force Two is required to be capable of being used with more than one tonearm, although in standard guise, for most people one arm is probably more than enough. While there is no 'easy way' put simply, the easy way to cut costs is not the right way to make a cheaper Air Force One.

Given that important set of limiting criteria imposed on the Air Force Two design before one fires up the CAD program, just how can you reduce prices? Well, first you remove the option of three different platter surface materials, replacing the 29kg stainless steel platter with a 10kg, solid cast aluminium design in the process. And you replace the air suspension system with oil-damped adjustable towers in each corner of the turntable plinth. And that's about it. OK, so this means a redesigned, slightly smaller, lighter plinth, but the free-standing asynchronous, DC-controlled AC motor block, the air bearing and vacuum disc hold down, the adjustable speed control, and the separate (yet silent) air pump/condenser/power supply box are essentially the same. There is also a commonality of design, although the Air Force Two is more squared off. Although not by much; in fact, the shape of the Air Force Two is not regular, and it's reasonably large, too.

That 'commonality of design' is well worth exploring. Although by its very nature, the Air Force Two is a handbuilt design, absolutely nothing about it gives the game away. This is not in anyway intended as a backhanded compliment, but the TechDAS designs have that air of reliable professionalism that you might find in a military component instead of a domestic turntable. Don't misunderstand this; such equipment is designed to be heavy duty, easy to operate device, capable of doing something complicated millions of times with almost no complaint. The Air Force Two has the same confidence about it. It's push-button control, and those push-buttons light up when activated. Speed control is shown on a blue LED panel on the control block in front of the deck, and speed adjustment (both 33/45rpm speed change, and fine-tuning of speed) are given equal emphasis. This air of complete reliability also comes from the cast upper and lower chassis, the big and powerful build, and the grey on grey finish that makes it look like it should be archiving vinyl in the Library of Congress or the British Library.

The Air Force Two's standard armboard position limits the options to a 9" or 10" arm, but the outrigger rear arm position can also take a 12" arm. Nishikawa-san is the distributor of Graham arms in Japan, which is why so many users end up recommending the Phantom as a natural partner to TechDAS designs, but in reality almost any arm can show what it is capable of sitting on the Air Force Two's subchassis. Construction and build are not simple, but this has more to do with physically moving the substantial parts around, rather than any strange installer voodoo. Given that I suspect most Air Force Two owners will either be 'tear up the manual' types who view the set-up procedure as something to be relished, or wealthy types who would happily pay someone else to do the installation job for them, I suspect going into detail about building a TechDAS in the home is little more than self-flagellation. Just remember that, when it comes to turntable set-up and Aesop's fables, "slow and steady wins the race", so take your time!



*“The TechDAS designs have that air of reliable professionalism that you might find in a military component instead of a domestic turntable.”*

*“It’s rock solid, both figuratively and metaphorically.”*

► Once set-up, the Air Force Two becomes the ultimate analogue musical reproduction machine, and it stays that way. It’s rock solid, both figuratively and metaphorically: the performance it makes is powerful, deep, and completely controlled, and the reassuring build and absolute stability means it will stay that way for years to come. This is not some high-end extravaganza that you need a road map to navigate to its off-switch – instead, the Air Force Two has all the operational niceties of something like classic Technics direct drive turntable, writ large.

The truth is, I burned through a lot of LPs in very short order listening to the TechDAS Air Force Two, because playing music through this deck is such a pleasure. It manages to combine the authority, weight, and solidity required of a high-end deck with a lot of the easy and unforced sense of timing found in more down-from-the-stratosphere models. The Air Force Two breathed life into an old favourite of mine; a Decca SKL of Gilbert & Sullivan’s overture to *The Pirates of Penzance* from the late 1950s. It was one of those ‘you are there’ moments, where more than half a century vanished and you were listening at the New Savoy Theatre in London. This was a remarkable play of a remarkable recording; the recording completely pitch-stable (a by-product of living in the digital age is turntables that are not pitch-perfect soon get outed), vibrant, and jumping out of a near silent background, despite the intervening years.

So it went on, through Joe Jackson [*Night and Day*, MoFi], Zakir Hussain [*Making Music*, ECM], even to Martha and the Vandellas *Dance Party* [Gordy, reissue]. This last was telling, because it sounded at once fabulous and awful. Fabulous because it delved deep into the recording, and awful because the deeper you went, the more you realised there wasn’t much to salvage beyond the stock Motown sound. That the Air Force Two didn’t try to make a silk purse out of a sow’s ear in the slightest was a significant bonus for the turntable design.

Most of all, though, the Air Force Two shines thanks to the absolute authority it imposes on the music, and yet it’s not so authoritarian as to refuse to allow the music to let its hair down a little. Even complex polyrhythms, such as found in the intrinsically funky West Coast big band meets ska in ‘Footprints’ from the Jazz Jamaica All Stars *Massive Vol. 1* [Gearbox], are not an issue here. The Air Force Two’s absolute (yet not clinical) precision snaps the album into sharp focus, letting those Zappa-esque vibraphone runs play on beautifully.

The TechDAS Air Force Two is one of those turntables that takes ‘Awesome’ in its stride. It always sounds awesome, even when it’s resolving something straightforward like Tom Waits voice. But when faced with an orchestra, complex music, or the kind of rhythmic drive that’s supposed to be the domain of lighter-weight turntables, the Air Force Two just gets out of the way and lets the music shine through. Just shy of £30,000 is a lot to pay for a turntable, but you do get a lot of highly recommended turntable, too! +

## TECHNICAL SPECIFICATIONS

**Type:** Belt-driven turntable with air-bearing and vacuum hold-down

**Drive system:** Belt drive with surface polished lyurethane flat belt

**Chassis:** Precision aluminum castings, weight 32.6 kg

**Platter:** Solid aluminum (A5056), weight 10 kg

**Motor:** AC synchronous motor. Speed controlled by DC amplifier

**Speed:** 33.3rpm/45rpm, Precise speed adjustment function

**Wow & Flutter:** below 0.03% (W.R.M.S)

**TT dimensions (WxD):** 685x460mm

**Total weight:** 47kg

### Air Pump and Supply Unit

**Power consumption:** 50W

**Dimensions (WxDxH):** 43x16x24cm

**Weight:** 10kg

### Accessories supplied with Air Force Two:

Tonearm base wood x 1 (drilled for specified tonearm)

Platter cover “The Platter Top”  
x 1 AC power cable x 1  
(180cm length)

### Optional items & Accessories

Special Damping Table

Second Tonearm Base

Tonearm base wood for supplement  
(for 1st and/or 2nd tonearms)

**Price:** £28,898

**Manufactured by:** TechDAS

**URL:** [www.techdas.jp](http://www.techdas.jp)

**Distributed by:** Absolute Sounds

**URL:** [www.absolutesounds.com](http://www.absolutesounds.com)

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